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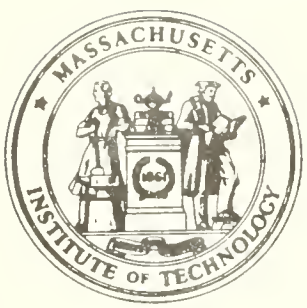

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A MANAGEMENT DEVELOPMENT COURSE FOR PHYSICIANS

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Ronald E. Fry
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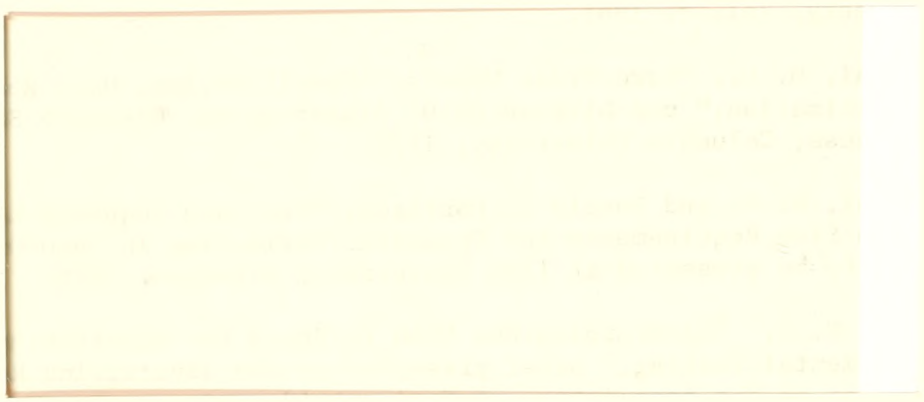

A MANAGEMENT DEVELOPMENT COURSE FOR PHYSICIANS

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The increasing cost and complexity of operating today's health care organizations has resulted in a corresponding increase in interest by the health care industry in more effective management of these systems. While administrators of hospitals and other delivery organizations have traditionally been involved in developing their management skills, members of the health professions themselves are now becoming increasingly aware of their own needs for more management skills if they are to participate more effectively in the administration of health care systems (Richardson, 1975). Recent examples of physician involvement in management training includes the AAMC Advanced Management Program for medical school deans and their staffs, increasing physician enrollment in health management programs at public health schools, business and management schools, and a proliferation of conferences and workshops on management sponsored by a variety of medical associations.

While much of this activity has focused on institutional management (i.e. hospital or medical school administration) an awareness of the relevance of management skills has begun to filter down to physicians at the delivery level. For example, the American Academy of Family Practice (1968) suggests in its requirements for residency programs that up to 35% of residents' time be allocated to "community medicine and administrative services including health service administration and electives."

One obstacle to more widespread interest in management education by physicians has been a somewhat limited perception by many physicians of what "management" is and how it could improve their effectiveness as health care deliverers (Beckhard, 1974). This is due in part to the absence of any formal exposure to management or administrative training in the traditional medical education process. In an effort to provide a more accurate understanding of the relevance and usefulness of management education to physicians and to train

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physicians in some basic management skills and techniques, a management course for physicians was developed, tested, and evaluated by the Health Management Project at M.I.T.'s Sloan School of Management. The remainder of this paper will describe the content and field-test results of that course.

Course Background

The relevance and potential usefulness of management skills for physicians increases as the complexity, ambiguity, and unpredictability of the medical environment increases, making the coordination of health care resources more necessary and more difficult. Physicians in primary care settings, particularly those utilizing many different types of physicians and other health professionals seem to face a more complex, ambiguous and unpredictable environment than most. Therefore, the management course under discussion was designed specifically for physicians in primary care settings. The course was offered on an experimental basis to three primary care residency programs. Residents were chosen as test subjects since post-graduate medical educational seemed to represent the best compromise between participants' availability (full-time practicing physicians might have difficulty finding time for such an experiment) and participants having sufficient health care experiences to understand the relevance of the management skills being addressed.

Course Content -- What is Management

The course addressed itself to the needs of physicians to coordinate their own and others' resources in the delivery of care. This coordination or "management" of care did not include such areas as accounting, budget control, etc. but rather the day-to-day management of health workers delivering care. In this context, the course focused on such issues as:

- defining and allocating the responsibilities of different health workers in delivering patient care;

- the resolution of conflicts between physicians and other health workers (e.g. nurses, social workers, etc.);

- resolving conflicts between physicians and administrators;

- dealing with the demands of the "leadership" role often expected of M.D.'s.

The specific objectives of the course were:

1. to develop in physicians knowledge and skills to help them better coordinate the health care delivery efforts of themselves and other health workers in primary care settings on a day-to-day basis; and

2. to develop among physicians the attitude that these settings can be more effectively "managed" by them, and thus increase the likelihood that these physicians may choose to work in primary care settings.

To achieve its objectives the course focused on six topic areas from management and the applied behavioral sciences. The areas were addressed in six sessions, each requiring approximately two hours, one session per week.

The sessions consisted of a combination of lectures, discussions, case studies, exercises, and simulations. There was little homework, although relevant articles and readings were distributed as optional assignments. Although the course was primarily designed for physician residents who have had some experience in, or who are currently rotating through, primary care settings, other health workers from the residents' work settings were asked to attend and participate in some sessions.

SESSION I. Factors Influencing the Coordination of Care

One of the most difficult obstacles to the coordination of care in primary care settings is the absence of a systematic way of viewing the inherent problems involved. Because of this, issues are dealt with by "crisis management." As a result, symptoms are often dealt with rather than problems. In this session participants learn a framework for diagnosing the basic issues involved in coordinating primary care, and are introduced to a systematic approach to resolving

these issues. In the session, participants use these models to identify and discuss problems in an actual work situation.

SESSION II. Managing Goal Conflicts

Because of the often ambiguous nature of the task(s) involved in delivering quality comprehensive health care, health workers often do not have a clear shared understanding of the specific objectives of the system they are working in. This often leads to confusion, conflict, and the associated inefficiencies in delivering care. In this session participants are introduced to methods of clarifying their own and others' goals, methods of identifying conflicts between individuals' goals, and mechanisms for resolving or managing these goals conflicts. The session then focuses on applying these techniques to the goals of the participants' own systems.

SESSION III. Managing Role Conflicts

Many of the difficulties experienced by primary care physicians involve conflicts between different health workers concerning their relative responsibilities or abilities to perform the tasks involved in delivering primary care. Time and energy are often wasted in struggling with and not resolving these issues. This session introduces: (a) a framework for identifying "role" conflicts and how they relate to the delivery task, and (b) a conflict resolution structure for resolving role conflicts and defining health worker roles. The focus in this session is on using this structure to resolve actual conflicts the physicians are experiencing with their co-workers.

SESSION IV. Allocating Decision-making Responsibility

Many types of decisions are made in the delivery of primary care. How these decisions get made, however, is seldom systematically managed, although many of the problems of coordinating care are directly related to the decision-

making process. This session develops a framework for determining what decisions are made, what constitutes a "good" decision, who should make them, and how resources should be coordinated in the decision-mkaing process. This framework is then applied by participants to the analysis of types of decisions actually made by health workers in their setting.

SESSION V. Organization Structure and Design

Traditional models of organization structure based on the needs of hospitals are often inappropriate for the delivery of primary care services. When transferred to ambulatory care settings these structures can increase the difficulty of effectively coordinating care delivery. This session explores the problems resulting from inappropriate organization structures and develops approaches to the design of more effective systems for primary care delivery. These analytical approaches are then utilized by participants in identifying problems and recommending changes in a typical ambulatory care organization structure.

SESSION VI. Managing the Change Process

Health care today is characterized by many pressures toward change of existing patterns and the introduction of new ones. Some understanding of how people, organizations, and systems change is essential to being effective at initiating and maintaining change. Primary care physicians are likely to find themselves in situations characterized by changing ideas and institutions, or characterized by a need for new ways of doing things. This session focuses participants on some of the basic concepts and skills involved in identifying needs for change and developing effective strategies for implementing change. These concepts and skills are then used by participants to work on a change problem in the participants' own settings.

Field-Test Sites/Evaluation Methodology

Field-tests of the course were conducted at two family practice residency programs and one combined primary care medicine and pediatric program. All three programs were located in urban areas serving multi-ethnic and racial populations. One family practice program (FP1) utilized a family practice center within a large hospital for residents' clinical experiences. The other family practice program (FP2) and the primary care program (PC1) utilized neighborhood and community health centers in addition to a hospital based family practice/primary care center for residents' clinical experiences.

All three programs utilized a variety of non-physician health workers in their practice settings including nurses, nurse practitioners, social workers, community health workers, etc. The participating residents in PC1 were in the second year of graduate training, in FP1 they were first and second year, while in FP2 all three years participated.

Evaluation of the course was conducted in three ways: 1) pre and post course questionnaires were used to measure residents' attitudes towards the "managability" of primary care settings and towards their own skills at resolving the problems inherent in managing these settings; 2) course sessions were evaluated individually through use of session assessment forms, filled out by participants after each session, rating the session's relevance and usefulness; and 3) the overall impact of the course was evaluated several weeks after the course by distributing a questionnaire asking whether anything learned in the course had been put to use, and whether residents recommended including the course in the core curriculum of their residency program.

Results

Residents were asked before and after the course to indicate their view of the extent to which the management or coordination problems found in primary

care delivery systems were resolvable (see Table 1).

Table 1. Pre and Post Course Residents' Views of the Resolvability of Primary Care Management Problems

	FP1		FP2		PC1	
	Pre	Post	Pre	Post	Pre	Post
1. Unresolvable	0	0	4%	4%	0	0
2. Resolvable only through drastic means	22%	22%	21%	21%	80%	60%
3. Resolvable with moderate investment of time & energy	77%	77%	75%	67%	20%	40%
4. Easily resolvable	0	0	0	8%	0	0
	100%	100%	100%	100%	100%	100%
	N=9	N=9	N=24	N=24	N=10	N=10

In addition residents were asked to indicate on a five-point scale the extent to which they personally felt they had the knowledge and skills necessary to solve these problems (1 = don't know how, 5 = do know how). See Table 2 for results.

Table 2. Pre and Post Course Residents' Mean Indication of Their Ability to Resolve Primary Care Management Problems

	FP1	FP2	PC1
Pre-Course	2.33	3.13	2.89
Post-Course	3.0	3.35	3.2
	N=9	N=23	N=10

The results in Table 1 show that residents in all three programs indicated they were only slightly more optimistic about the prospects of resolving primary care management problems after the course. However, Table 2 indicates that on

an average residents were somewhat more confident in their own ability to resolve these problems. Apparently those residents who felt the problems were manageable before the course thought that the course had helped them acquire the requisite knowledge and skills to themselves do something about the problems addressed.

Residents were asked to evaluate the relevance and usefulness to their work as health care providers of each of the six sessions on a five-point scale (1 = low, 5 = high) immediately after each session (see Table 3).

Table 3. Mean Evaluation of the Relevance and Usefulness of the Course Sessions*

	FP1		FP2		PC1	
	Relevance	Usefulness	Rel.	Use.	Rel.	Use.
Session 1. Systems Approach	3.14	3.58	3.78	3.69	4.27	4.27
Session 2. Goal Conflicts	-	-	3.38	3.53	3.0	3.45
Session 3. Role Conflicts	4.09	4.09	4.47	4.18	4.0	4.22
Session 4. Decision-Making	3.11	3.44	3.58	3.33	3.89	3.75
Session 5. Organization Structure	3.38	3.33	3.59	3.44	3.64	3.45
Session 6. Managing Change	3.22	3.11	3.84	3.63	4.44	4.11

*These mean evaluations include those of faculty and other health workers present in addition to residents.

The results in Table 3 indicate that on an average all sessions were generally seen as both relevant and useful by participants to their work as health care deliverers. The sessions dealing with the identification and resolution of

role conflicts seemed to be particularly worthwhile to most of the residents, faculty and other health workers present. This particular session is perhaps the most pragmatically oriented of the six since it teaches a conflict resolution skill which is immediately implementable, and which is in fact practiced during the session by residents and their colleagues.

Finally, residents were asked several weeks after the course to indicate whether they had put to use in their work any of the knowledge and skills learned in the course. In addition they were asked whether they would recommend that the course, or one like it, be included in the core curriculum of their residency program. Unfortunately, the response rate for this second post-course questionnaire was not universally high. However, the results collected are summarized in Tables 4 and 5.

Table 4. Percentage of Residents Who Indicated They Had Used Course Knowledge and Skills in Their Work

	FP1	FP2	PC1
Used Course Knowledge/Skills	29%	48%	100%
Did Not Use Yet	71%	52%	0
	100%	100%	100%
	N=7	N=25	N=2

Table 5. Extent to Which Residents Recommended the Course Be Included in Their Core Curriculum

	FP1	FP2	PC1
1. I don't recommend it	0	20%	0
2.	14%	16%	0
3. Undecided	0	13%	0
4.	71%	27%	0
5. I highly recommend it	14%	23%	100%
	100%	100%	100%
	N=7	N=30	N=2

Table 4 indicates that in two sites, FP2 and PC1, of those residents responding, many reported they had been able to put the material learned in the course to use, while in FP1 only a small percentage had. It is interesting to note that in FP2 and PC1 the course sessions had been attended more frequently by faculty and non-physician health workers from the residents' practice sites, while non-resident attendance had been intentionally limited at FP1 for experimental purposes. Apparently learning together is a step towards working better together. This may also account for the generally higher ratings by FP2 and PC1 of the relevance and usefulness of the individual sessions as seen in Table 3.

Table 5 indicates that there were strong recommendations to include the course in the core curriculum at FP1. At PC1 the response to this question was favorable from the two residents who responded. One reason for the low response rate at PC1 was that the PC1 staff had just conducted their own internal evaluation of the management course as well as all other didactic inputs in their program. In this evaluation the management inputs received higher overall ratings from residents on relevance and usefulness than any other single set of inputs

(e.g. research, sexuality, screening and compliance, etc.). In addition, 43% of those responding indicated more time should be allocated to management inputs, 43% indicated the same amount of time should be allocated in the future, while only 14% suggested less time be devoted to management training. Thus both FP1 and PC1 seem inclined to maintain the management course in their core curriculum.

However, there were mixed feelings about including the course in the core curriculum at FP2. The bi-polar distribution of responses in FP2 and to some extent in FP1 and PC1 may reflect accurately the mixed feelings of the physician population in general as regards "management" training. Implicit in many of the skills and techniques taught in this course was the requirement that the physician examine, and possibly revise, his/her assumptions concerning the responsibilities, decision-making authority and day-to-day behavior of physicians and other health workers in the delivery of care. For many residents (and faculty) this approach does not set well with the traditional image of the physician fostered by much of his/her previous medical education. Perhaps management training, if seen as useful, needs to be initiated earlier in the medical education process if it is to be more readily accepted by physicians.

Conclusions

Overall the results from the three test sites seem to demonstrate the relevance and usefulness of this kind of management skills training to physicians in family practice and primary care settings. These types of settings were chosen for the field-testing because of their obvious needs for skills in coordinating or managing human resources, and because of their accessibility. However the increasing complexity of health care delivery in all fields and the growing reliance on multidisciplinary approaches to care suggests that this type of management training may be useful to a much wider audience of physicians and other health care deliverers.

For any potential physician audience it appears important for material of this nature to be tied as closely as possible to the real day-to-day problems the participants encounter. To this end, it seems advantageous to focus sessions on actual work problems participants are experiencing even going so far as to encourage the participation of physicians' co-workers in the sessions. In addition, it seems important to appeal to physicians' pragmatism by providing them with skills, tools or techniques to resolve their problems, not just concepts and theories to understand them better.

Finally, if this type of training is to appeal to the broader physician population it seems important that it receive greater attention in the undergraduate years of medical education where many of the attitudes and assumptions about what being a doctor is are planted and firmly rooted.

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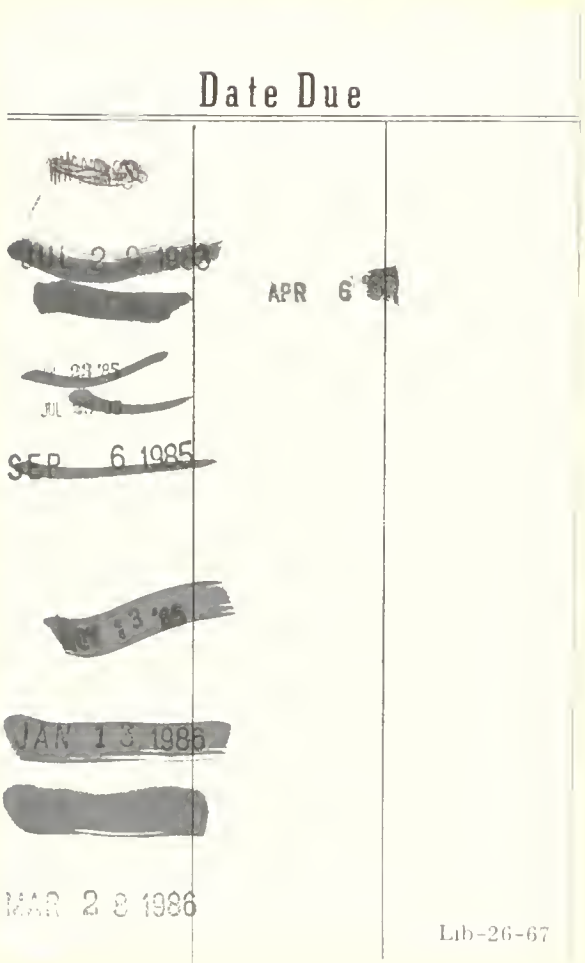

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